DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020165 Address: 333 Burma Road **Date Inspected:** 16-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG & Tower**

Summary of Items Observed:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Mike Hasler was present during the times noted above for observations relative to the work being performed.

OBG Segment Name: OBG 7CE+7BE / Trial Assembly

This Caltrans QA inspector observed ZPMC worker trimming the bottom plates at the transverse splice weld joining Segment 7CE to 7BE. This QA inspector observed ZPMC cutting the bottom plate at Segment 7BE using electrical driven carriage mounted with oxy-fuel cutting torch and guided with the use of a metal track. The cut surface appeared to be smooth and free of gouges. ZPMC Quality Control (QC) inspectors are identified as Mr. Zhang Xia Ming and certified welding inspector (CWI); Mr. Luan Zha Gang. The following digital picture illustrated thermal cutting of the bottom plate. Photo please see; Z:\Inspector Reports\B293 Hasler.

OBG Segment Name: OBG 7BE+7AE/ Trial Assembly

This Caltrans QA inspector during visual inspection observations observed ZPMC performing fit-up and tack welding joining T-stiffeners at side plate transverse weld. These T-stiffeners had previously been welded at the stem to mating T-stiffener with CJP weld. However, these welds had to be removed for realignment purposes. The tack welder is identified as #048659, using Shield Metal Arc Welding (SMAW) process and tack welding in the 3F position. ZPMC QC inspectors are identified as Mr. Zhang Xia Ming and CWI; Mr. Luan Zha Gang.

OBG Segment Name: OBG 7CE / Trial Assembly

This Caltrans QA inspector during visual observations at 7CE discovered ZPMC worker free hand thermal cutting the deck plate without the Engineers approval. Access to the area being cut was not restricted due to cross

WELDING INSPECTION REPORT

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sectional geometry and or position, in so far as mechanical guides could not be used. This QA inspector generated a Quality Assurance-Incident Report for the thermal cutting violation. See Quality Assurance-Incident Report, dated 01-16-10 for additional information. ZPMC QC inspectors are identified as Mr. Zhang Xia Ming and CWI; Mr. Luan Zha Gang. The following digital picture illustrates manual thermal cutting of the deck plate. Photo please see; Z:\Inspector Reports\B293 Hasler.

OBG Segment Name: Lift 1 Tower / Heavy Duty Dock

This Caltrans QA inspector observed Flux Cored Arc Welding (FCAW) in progress. Welders are identified as #062126 and #058792 welding partial joint penetration (PJP) welds in the 3G position using WPS-B-T-2333-TC-P4-F. The welds are identified as WSD1-SA295-B/E-25 and WSD1-SA295-B/E-16. ZPMC QC inspectors are identified as Mr. Sun Zi Wang and CWI inspector, Mr. Gong Liang Zhu. The welding variables recorded by QC appeared to comply with the WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

"As noted within the contents of this report."

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler,Mike	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer